Lentiviral particles for Firefly Luciferase

Catalog #: SP008-400

Lentiviral particles pseudotyped with Truncated SARS-CoV-2 spike glycoprotein (Brazil P.1 & D614G) for transferring genes to a variety of mammalian cells expressing human ACE2 receptor on the cell surface.

Description

- **Gene:** Firefly Luciferase
- **Promoter:** CMV
- **Tag:** N/A
- **Reporter :** EGFP
- **Resistance marker:** Puromycin resistance gene
- **Additional note:** N/A

Contents and storage

Provided as 50 µl/vial

Titer 1: ＞ **5×10^6 TU/ml** **Titer 2**: ＞ **5×10^8 RLU/ml**

For lot-specific datasheet and titers, please visit http://www.igenebio.com/tech/datasheet/index.php

Lentivirus particles are shipped on dry ice and must be stored at -80℃ immediately upon receipt. Avoid repeated freeze-thaw cycles as this will reduce titers. Divide into useful aliquots if necessary and store at -80℃.

Viral titer

The titers of Transduction Unit/ml (TU/ml) and Relative Fluorescent Unit/ml (RFU/ml) of the spike protein-pseudotyped lentiviral particles were provided for each particle, based on the transduction efficiency using GeneCopoeia's ACE2 and TMPRSS2/HEK293T stable cell line (Cat.# SL222).

The luciferase titer (RLU/ml) was based on the viral particle's firefly luciferase signal after transducing the ACE2 and TMPRSS2/HEK293T cells, and was determined using GeneCopoeia's Luc-Pair™ Firefly Luciferase HS Assay Kit (Cat.# LF007). The eGFP transduction titer (TU/ml) was determined by the FACS sorting of the eGFP expressing ACE2 and TMPRSS2 /HEK293T cells after pseudotyped viral transduction.
The customer should test the transduction at MOI=0.3, 1, 3, 5, 10 for their specific cell lines in order to get the best transduction efficiency.

Overview of production

Identity of lentiviral transfer vector: pEZ-Lv201

The lentiviral particles were generated by following a standardized protocol using highly purified plasmids and EndoFectin-Lenti™ and TiterBoost™ reagents.

The lentiviral transfer vector was co-transfected into 293Ta cells (Cat #: LT008) with Lenti-Pac SARS-CoV-2 Truncated Spike protein (Brazil P.1 & D614G) packaging mix(Cat#: LT057). The lentivirus particles were purified and stored at -80℃ in aliquots (purified particles).

Quality control

The lentiviral expression construct was validated by full-length sequencing, restriction enzyme digestion and PCR-size validation using gene-specific and vector-specific primers. Product is confirmed free of bacteria, fungi and common Mycoplasma contamination.

User manual

Please contact GeneCopoeia for a copy or download at:
Lenti-Pac™ SARS-CoV-2 Spike protein-pseudotyped Lentivirus Packaging Kit

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